AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A method of operating a fuel cell system having at least one fuel cell whose operating temperature is regulated by a cooling circuit that includes a cooling heat exchanger, said method comprising:

using the cooling circuit to control the operating temperature;

detecting the operating temperature;

detecting an ambient temperature of the heat exchanger;

~~defining~~ determining a temperature difference between said detected operating temperature ~~of the at least one fuel cell as a function of~~ and said detected ambient temperature of the cooling heat exchanger, such that waste heat of the at least one fuel cell is removed at a lowest operating temperature at which such removal is possible; and

controlling said cooling circuit ~~controlling said operating temperature of the at least one fuel cell, to achieve said defined operating temperature~~ such that, for a current load on the at least one fuel cell, the temperature difference is reduced to the extent just sufficient to allow removal of the waste heat generated on the fuel cell at said current load.

Claim 2 (original): The method according to Claim 1, wherein:

the at least one fuel cell comprises a PEM fuel cell; and

the fuel cell is operated at an operating temperature between 95°C and 55°C.

Claim 3 (original): The method according to Claim 1, wherein the volume flow of a cooling medium flowing in the cooling circuit is controlled by devices for influencing the cooling of the at least one fuel cell.

Claim 4 (original): The method according to Claim 3, wherein convection of a gas flowing around the cooling heat exchanger is influenced by the devices for influencing the cooling of the at least one fuel cell.

Claim 5 (original): The method according to Claim 4, wherein the gas is air.

Claim 6 (original): The method according to Claim 1, wherein the operating temperature of the at least one fuel cell is defined such that a temperature difference between a cooling medium flowing in the cooling circuit at the cooling heat exchanger and said ambient temperature is maintained at a minimum value that is sufficient to ensure removal of the waste heat generated as a function of the electric load at the at least one fuel cell.

Claim 7 (original): The method according to Claim 1, wherein said fuel cell system is operated in a motor vehicle.

Claim 8 (original): The method according to Claim 7, wherein the fuel cell system is operated as an auxiliary power unit (APU).

Claim 9 (original): The method according to Claim 7, wherein the fuel cell system is operated at least as part of the driving system of the motor vehicle.

Claim 10 (canceled).